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Carter and Science: There Will Be No Upheavals

What will the Carter Administration mean for science and technology?

Apart from a go-slow pledge on the development of nuclear power, the campaign record is sparse and short on specifics. The reason, of course, is that the care, feeding, and application of science and technology is so parochial that it never figures large in the hunt for presidential votes. But even if the record were voluminous and specific, it is as certain as such things can be certain that four years after Inauguration Day, the science and government relationship will not have been altered beyond present recognition, or, in fact, altered very much at all.

Carter is committed to a consolidation of various government functions, and it is likely that some federal research-related agencies, particularly in the energy

being largely separated from higher education, or the Swiss system of government funds playing a relatively minor role in overall national research activities.

Furthermore, in looking to the future, it seems likely that we are in for a long respite from politically inspired Herculean projects, such as the man-on-the-moon venture, or the National Cancer Program. Eventually there will be others, but memories of these distortions in

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Joint Atomic Committee Facing the Axe--Page 5

field, will be swept up in that exercise and lumped together under new titles. But the essential fact about Washington and science today is that their relationship is mature and steady, rather than rapidly expanding and experimental as it was when Kennedy took office. Despite whines that regularly emanate from many of the leaders of research, some of whom look back to golden ages that never existed, the research establishment is highly productive — which is all that the public need care about. And to the extent that real difficulties exist, such as finding jobs for young researchers, they are inevitable when economic conditions terminate a long period of rapid growth. If the gross national product were suddenly to spurt upwards, there would be more money all around, and research organizations would receive a slice, which would mean more jobs. But, by all accounts, that is not to be expected.

In assessing the next few years, however, the most fundamental factor is that there is no influential support for remaking the institutional framework of American research. It does not have to be the way it is, as is evidenced by very different arrangements governing research in other industrialized nations. In the US, however, no one whose opinion matters has recommended for example, the Soviet system of tight centralization of all research, or the German system of basic research

In Brief

Lewis Branscomb, the IBM chief scientist who headed Jimmy Carter's Task Force on Science and Technology Policy, is often mentioned in Washington science policy circles as heir apparent to the White House science advisory job. Branscomb tells SGR that "no one has asked me to take the job and I've got an awfully good one at present." He added, however, that the White House post is an attractive one, but would say no more.

Meanwhile, the newly established Office of Science and Technology Policy is in full operation, in accord with Director Stever's desire to give his successor an ongoing operation. Among the latest activities: Contracts with the Futures Group, Inc., and Harbridge House for studies on how OSTP should fill its legislative mandate to issue an annual report and 5-year forecasts on national R&D activities. Another contract has been issued to the Jet Propulsion Laboratory for a systems analysis of radiation waste management in anticipation of ERDA's forthcoming plan for dealing with the problem.

A new contribution to public confusion over the therapeutic value of vitamins B and C: Theodore Cooper, HEW assistant secretary for health, is quoted in the Nov. 3 *Medical Tribune* as saying, "I personally take the water soluble vitamins in fairly large doses." In a Q. and A. with the *Tribune's* publisher, Cooper also said, "I believe that Professor [Linus] Pauling's thesis [concerning the value of Vitamin C] is deserving of serious considerations." NIH, however, has repeatedly turned down Pauling's requests for funds. Cooper told SGR that he takes 500-1000 mg. of vitamin C per day, and said the basis for the taking the stuff was "intuitive and partially experiential."

...Candidates Stated Similar Views on R&D

priority-making are sufficiently fresh to provide at least temporary immunity against another go.

The best insight that we have into Carter's thinking on research and development is in the October 18 issue of *Chemical & Engineering News*, which contains the candidates' responses to questions on R&D. The striking, though not surprising, fact is that candidates Ford and Carter did not differ significantly in their answers. The reason, of course, is that the people who wrote the answers for them are pretty much in harmony on these matters. The task of replying for the President was assigned to Science Adviser H. Guyford Stever, while Carter's reply received "inputs" from Lewis Branscomb, the IBM Chief Scientist, who served as chief of Carter's Science and Technology Policy Task Force. Stever and Branscomb are both mainstream veterans of the Washington science-policy network, and though Branscomb was identified with the Democratic campaign, he had no difficulty serving as an adviser to a Republican White House when Stever organized committees last year to prepare for the reestablishment of the White House science office.

Money and Priorities

To a catchall question about money and priorities, Carter returned a carefully crafted answer that can accommodate almost any specifics that he may eventually choose to apply. "The federal budget for R&D," he stated, "should not be reduced, but is unlikely to be expanded dramatically because of resource constraints. Nevertheless, there is a great opportunity to rebalance expenditures in such a way as to stabilize the long-term commitment to the basic research foundations on which all technology rests, to increase the priority given to research in fields likely to be of long-term economic importance, and to give proper attention to environmental, health, and other civil concerns, including applied research important in global problems."

Now, without any specifics, the statement is no more than an expression of good intentions that are shared by the Ford Administration, both in principle and in programs. Everyone agrees that the R&D budget should not be reduced and that it is not likely to be greatly increased. Research planners of various political stripes have long called for taking the fiscal zigs and zags out of federal support for basic research. The difficulty is that Congress does not like to appropriate money for commitments beyond a few years at most, and there is considerable justification for its reluctance. Since the country's moods and priorities do shift with time, there is no reason why basic research should be isolated from tides that affect just about everything else in our society.

By "stability" many research leaders mean guaranteed support — and that's not going to happen, regardless of what Carter may have in mind.

Against Fixed Formula

However, if stability is taken to mean the avoidance of abrupt shifts and the fulfillment of commitments, there is no reason why that cannot be accomplished within a given budget. Most of the problems of the past decade or so have occurred when the White House, usually for window-dressing purposes, has suddenly decreed a hold on federal spending and hiring, and federal agencies have had to tell their clients to refrain from spending money in hand. Since the tactic is especially commonplace among newly inaugurated presidents who campaigned on an economy platform, it will be interesting to see how Carter will deal with the opportunity to demonstrate that he's against runaway spending.

Continuing his response to that money and priorities question, Carter covered all bases by stating that "The level of national R&D effort, public and private, should be growing with the economy. In recent years it has in fact been falling, as economic growth has sagged and the federal government's R&D strategy has fallen into disarray. This trend must be reversed. But it is wrong to tie R&D expenditures to a fixed fraction of any micro-economic activity. It is a means to an end, and the level of investment follows the ability of organizations to use it effectively. Thus, at the national level, attention must be given to creating conditions that encourage high-risk, high-payoff industrial activity, and that motivate both public and private sector institutions to do the research that will best protect the long-term future of the country."

Doomsday Prophecies

Even allowing for campaign hyperbole, it is difficult to take seriously the assertion about the government's R&D strategy being in disarray. Perhaps the most common complaint from inside the research establishment is that it is too tightly managed, too closely tied to specific objectives, and lacking in freewheeling opportunities for speculative research.

Typical of these complaints is the doomsday response that Harold Agnew, director of the Los Alamos Scientific Laboratory, sent to the National Science Board when it queried 900 research administrators and scientists last year on what ails American science: "The ever increasing bureaucracy composed of managers who require more and more detail, justification, and guaranteed schedules, will in the not too distant future

...Carter Sees Need for a US Science Policy

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completely eradicate our Nation's world position in research and technology."

The unfortunate truth is that at the operating level, bureaucracy is the standard antidote for disarray.

However, if Carter, or his ghosts, were concerned by the simple question of where it is that the federal government puts its R&D money, the fact of the matter is that the biggest growth in recent years has been in the civilian sector. Activities related to national security still hog about two-thirds of all federal spending for R&D, to the apparent detriment of the civilian economy. But it is doubtful that Carter is going to cut up military R&D, given his repeated assertions about the need for a strong defense and the fact that military R&D is just emerging from some rather lean years, at least in terms of what the armed services say they need to research.

Priorities Criticized—Again

One of the most durable characteristics of R&D in the US is that critics, of whom there are plenty, regularly conclude that it is misdirected in its priorities. The latest of these assessments is contained in a series of papers prepared for the Joint Economic Committee (see page 4). But while most everyone agrees that the priorities are wrong, there is no consensus on what would set them right.

The top priorities for civilian research are now in energy, environment, and health, with "productivity" coming on fast as a growth sector. But all of these subjects are burdened by a paucity of understanding as to how research findings are to be absorbed into the complexities of American society. To the extent that there is disarray, it's on the "soft" side of the problem, for one gets the impression that the research effort is reasonably well organized and productive. To take one example, solar energy: the scientific and technological unknowns are trivial compared to the problems of developing the industrial and service infrastructure for making solar energy an available option.

At Congress's initiative, demonstration projects are in the works — and it is likely that Carter will be more supportive of such efforts than Ford has been — but no

matter how the R&D table of organization is juggled, solar energy is not going to emulate the electronic calculator in swiftness of consumer acceptance.

In response to another question, Carter stated: "Certainly, the US government should have a coherent overall science and technology policy. . . . The question is, how much pulling together of technical agency activities is desirable? The 'mission-oriented' agencies should certainly continue to operate laboratories and fund or cost-share R&D outside government. . . . Such technical programs should not be separated from their end purposes and drawn together."

But Which Science Policy?

The trouble with policies for science and technology is that, while many persons agree they are desirable, it is difficult to get down on paper anything that makes much sense. It is, in fact, the policy of the US government that there shall be a lot of R&D paid for with government funds, that defense, health, food supply, environmental purity, and so forth, are proper objects of federally supported research. But unless Carter wants to commit himself to a specific financial formula for support of R&D, which he says he doesn't, then it is hard to make the leap from a favorable attitude to a concrete policy. If Carter were to say that 2.5 per cent of GNP should be assigned to R&D and all bright youngsters should have their scientific aspirations subsidized, we'd have the beginnings of a national science policy. But he won't say that, for the very good reason that money formulas and guarantees of professional training for all qualified comers would produce cumbersome rigidities. The GNP is no sensible guide to how much space or energy research is prudent, nor should the federal government be committed to educating specialists regardless of whether the economy can use their skills. Medicine, for example, has prospered mightily through the worst of recent times, but an assortment of expert studies generally agrees that the nation is now approaching an overproduction of physicians.

Policy statements appeal to our sense of tidiness. But

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Editor and Publisher

Daniel S. Greenberg

European Correspondent

Michael Kenward (London)

Contributing Editors

Colin Norman, Pamela Moore

Circulation Manager

Alice Anne Freund

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R&D Priorities Assailed in Congressional Study

The Congressional Joint Economic Committee (JEC) has published a compendium of papers on federal support of R&D which provides a thoughtful, and in many respects highly critical, analysis of current research policies and spending priorities.

Though the chief theme running through the papers is not too surprising, namely that few techniques have been developed to measure the results and the overall quality of federal R&D programs, some of the implications were spelled out clearly by Senator William Proxmire (D-Wisc.), chairman of the JEC's subcommittee on Priorities and Economy in Government, in a statement issued with the compendium.

The papers, Proxmire announced, identify "serious and startling shortcomings in the way federal research and development funds are allocated and spent." Because reliable indicators of the results of federal R&D have not been developed, Proxmire noted, "large amounts of public funds are being spent for R&D activities without a clear understanding of whether the potential or actual benefits are worth the costs. . . this means that there is a high degree of arbitrariness in decisions to fund some activities and not fund others."

Proxmire's complaints can be found to some extent in the comments of the authors of the papers. Edwin Mansfield, of the University of Pennsylvania, states, for example, that "it seems fair to say that most economists who have studied this problem have

come away with the impression that our nation's programs in support of civilian technology are *ad hoc*, and that it is difficult to understand why we have allocated this support in the way that we have." Mansfield went on to note that although the lion's share of federal R&D funds is channeled into industries such as aircraft, electrical equipment, and so on, "the marginal rate of return from R&D may be higher in less exotic areas like textiles or machine tools than in these high-technology fields."

Mansfield concludes, however, that crash federal efforts to redress the balance in funding "could do more harm than good," and he suggests that selective support for industries in which there is under-investment in R&D should be coupled with more general forms of support, such as general tax credits for R&D.

Proxmire concludes that "it is disconcerting that the scientific community has not yet come up with scientific tools for measuring the results of R&D," and warns that "continued public support of R&D activities must be based on more than just 'faith' that society will be better off if the public money is spent."

Copies of the compendium, entitled *Priorities and Efficiency in Federal Research and Development*, are available free of charge from the Joint Economic Committee, Room G-133, Dirksen Senate Office Building, Washington DC 20510.

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science and technology are too diverse, delicate, unpredictable, and amorphous for the government's intentions about them to be embalmed in prose.

There are some R&D policy matters on which the Carter Administration will leave an imprint, but decisions concerning these have been working their way through the system for some time and the choices that Carter can make are fairly limited. Pending for presidential decision are the recommendations of the President's Biomedical Research Panel (SGR Vol. VI, No. 9). Basically, these call for protecting the role of the National Institutes of Health as a bastion of fundamental research; also for bringing the high-flying National Cancer Institute back into NIH as a co-equal among the agency's many institutes. Ford never got around to saying yes or no to these and other proposals for NIH, but he probably would have agreed to them eventually, and

there is no reason to assume that Carter will do otherwise. The proposals are sensible, and, apart from some Congressional quibbling about NIH appearing to be more interested in research than in cures — whatever that means — there is widespread support for NIH's traditional role.

Carter will also have to make a slew of major R&D appointments. So far, he and his Atlanta-based inner circle have maintained a perfect blackout on all appointments, from the cabinet-level downwards. There will probably be a lot of surprises when the appointments are announced, but the R&D area is least likely for surprises. From his service with Admiral Rickover, Carter knows a bit about the management of R&D, and it is doubtful that he will pick managers who will have to learn on the job. At the national level, a rather small cast of characters has been involved in running Washington's relationship with science and technology, and the odds are that Carter's R&D appointees are already enrolled in that cast. —DSG

Congressional Reform May Scrap Atomic Committee

Though proposals for Congressional reform are frequently discussed but seldom enacted, there is at least a reasonable chance that the next Senate will complete a major overhaul of its committee system, and there is a better chance that the once-powerful Joint Committee on Atomic Energy will be scrapped.

A detailed plan for restructuring Senate committees, which has major implications for scientific affairs on Capitol Hill, has been drafted by the Temporary Select Committee to Study the Senate Committee System, and it is expected to be the first item of business when the Senate reconvenes in January. The Select Committee's final proposal is a combination of a number of suggestions it put forward last September (SGR Vol. VI, No. 16).

The reorganization would condense the Senate's present 31 standing, select, and joint committees to 14 standing committees, and one select committee, the recently created Select Intelligence Committee. Most scientific affairs would be consigned to a new Committee on Commerce, Science and Transportation. Health policy — including biomedical research — would fall under the jurisdiction of a Committee on Human Resources. Energy policy, including all energy R&D, would wind up in a Committee on Energy and Natural Resources. And Environmental affairs, including nu-

clear regulation, would be lumped together in a Committee on Environment and Public Works.

The proposed Committee on Commerce, Science and Transportation would be responsible for science, engineering, and technology policy development, and it would have specific oversight for the Office of Science and Technology Policy, the Office of Technology Assessment, the National Science Foundation, the National Aeronautics and Space Administration and "broad oversight into scientific, engineering and technical activities of the federal government, including all research and development activities." (The Select Committee proposal also includes the National Academy of Sciences in the list of government agencies for which the committee is responsible.)

If the committee is established, the likely chairman would be Sen. Warren Magnuson (D-Wash), present chairman of the Senate Commerce Committee. The proposal would mean that Senator Kennedy would have to relinquish the authority he now holds over the National Science Foundation through his chairmanship of the Labor and Public Welfare subcommittee on NSF.

The proposed Energy and Natural Resources Committee would consolidate virtually all the responsibility for energy development, which is now scattered among

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NSF Details Longterm Drop in Research Support

The National Science Foundation (NSF), keeper of the nation's research statistics, has produced a sheaf of figures for 1975 which provide some support for complaints that R&D has been suffering from abrupt shifts in funding, coupled with an overall longterm decline.

The figures indicate that spending on industrial R&D reached \$23.5 billion in 1975, a 5 per cent increase from 1974, but a drop of 4 per cent in constant dollars. Within that total, energy R&D increased by 18 per cent, while research and development on pollution control dropped by 1 per cent. According to NSF, the decline in pollution abatement R&D was mostly caused by a decrease in expenditures by the automobile industry, which was then caught in the recession and seeking Congressional relief from the rigors of the Clean Air Act.

As for employment, there was an increase of 1 per cent in the total number of scientists and engineers employed full time between January 1975 and January 1976. The total number reached 362,500.

There has also been a marked improvement in the employment of doctoral scientists and engineers. NSF reports that although the total number of doctoral scientists and engineers grew from 245,000 in 1973 to 278,000 in 1975, employment more than kept pace with output from the universities so that the Ph.D. unemployment rate dropped from 1.2 to just under 1 per cent. Most of the employment increase came in the industrial sector.

Finally, NSF reports that the federal government obligated some \$4.463 billion to institutions of higher education in 1975, an increase of a mere 1 per cent in current dollars and a drop of 8 per cent in constant dollars. Within those totals, however, R&D support fared relatively well, decreasing by only 4 per cent in constant dollar terms.

Copies of the reports, *Science Resource Studies Highlights*, numbers NSF 76-320, 76-324, 76-326 and 76-327, are available free of charge from NSF, Division of Science Resource Studies, 1800 G St NW, Washington DC 20550.

Carter Faces Major Decisions on Nuclear Power

Throughout the election campaign, President-elect Jimmy Carter frequently promised a major overhaul of nuclear policy, aimed at minimizing, though not abandoning, the United States' dependence on the atom as a source of power. It should not take long for Carter's nuclear policies to crystallize, for he will quickly be faced with some crucial decisions which will vitally affect the long-term future of the nuclear industry.

It should first be noted that though Carter has displayed some coolness toward nuclear power, he has specifically declared himself opposed to a moratorium on its further development, acknowledging that "our increasing demand for electricity is likely to require dependence on this source for some time." His chief concern, he has stated, is to ensure that nuclear plants are safe and that the burgeoning international trade in nuclear technology does not lead to the spread of atomic bombs around the world.

His statements, in other words, leave him plenty of room to maneuver. But two related issues are ripe for decision, and Carter's actions will dictate much of the future course of nuclear policy. The first is whether to permit chemical reprocessing of wastes from commercial reactors, with a view to extracting plutonium and recycling it as a reactor fuel. And the second is whether the liquid metal fast breeder reactor (LMFBR) should continue to enjoy top priority among the federal government's energy programs. In particular, Carter must swiftly decide whether to permit construction to begin on a demonstration LMFBR at Oak Ridge, Tennessee.

SENATE (Continued From Page 5)

a variety of committees. It would be based largely on the present Interior Committee, whose chairman, Henry Jackson, would be the logical head of the new committee.

The proposals would entail scrapping a number of committees which now have jurisdiction over some science affairs, including the Committee on Aeronautical and Space Sciences and the Joint Committee on Atomic Energy (JCAE). The JCAE is also under attack in the House, and its chances of survival look slim.

When the House Democratic caucus meets next month, Reps. Clarence Long (D-Md.) and Jonathan Bingham (D-NY) will offer a proposal to scrap the Joint Committee and consign responsibility for nuclear R&D to the House Committee on Science and Technology. Their chances of success are enhanced by the fact that the JCAE suffered the loss of many important members this year (see page 7), and according to one well-placed Congressional source, the odds are against the JCAE surviving.

Those two issues are crucial to the long-term prospects of the nuclear industry because without either the plutonium recycle or the breeder reactor, present-generation reactors will start to run out of low-cost uranium early in the next century. Plutonium recycle could extend uranium supplies for a few decades, while the breeder could extend the life of nuclear power for several centuries.

A decision on reprocessing and plutonium recycle is imminent because the nuclear industry has already applied for a permit to recycle plutonium, and a large privately built reprocessing plant is nearing completion in Barnwell, South Carolina. The Nuclear Regulatory Commission is now studying the matter and is about to begin public hearings, but a Presidential decision will be required. To a large extent, Carter's decision will hang on international considerations.

A consistent theme in Carter's campaign statements on nuclear power was that he would take strong measures to discourage international trade in reprocessing technology, and a number of arms control analysts have argued that the most effective way to prevent such trade is for the United States to abandon its own domestic reprocessing plans and to persuade others to do likewise. Just five days before the election, Ford announced that he would defer a decision on domestic reprocessing until the proliferation aspects had been further examined. Though Carter dubbed Ford's statement "too little and too late," his own policy on reprocessing has yet to be stated explicitly.

His plans for the LMFBR have, however, been stated
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Though the Senate Select Committee's proposals will undoubtedly be altered in the next few weeks by behind-the-scenes negotiations, the chances of some restructuring of Senate committee jurisdictions are generally considered good. For one thing, a number of influential senators who would stand to lose considerable authority in the realignment either retired or were defeated. There will be 17 freshmen senators next year, who stand to lose no authority from the realignment.

The proposals also left untouched some of the more powerful Senate committees, including the Appropriations Committee, the Armed Services Committee, and the Finance Committee.

Nevertheless, the proposed changes would still cause several senators to lose committee seniority which has taken years to acquire, and the proposals will therefore get a rough passage. There is already a move afoot to consign the entire matter to the Senate Rules Committee for further study — a move which would so delay the proposals that the advantage of acting before the new Senators have built up committee authority would be lost. —CN

Election Brings Shifts in Congressional R&D Responsibilities

Election casualties among Senators and Congressmen with major responsibilities for scientific affairs were relatively slight. The chief Senate victims were Frank Moss (D-Utah), chairman of the Senate Committee on Aeronautical and Space Science, and John Tunney (D-Calif.), chairman of a fairly quiescent Commerce subcommittee on science and technology.

Retirements and election defeats have, however, claimed five of the nine Senate members of the Joint Committee on Atomic Energy (JCAE). Chairman John O. Pastore (D-RI) and Stuart Symington (D-Mo.) both retired, while Joseph Montoya (D-NM), and James Buckley (R-NY) joined Tunney in defeat at the polls. The wholesale change in the JCAE membership will considerably ease moves to scrap the

committee which are now taking place in both the House and the Senate (see page 5).

On the House side, Olin Teague (D-Tex), chairman of the House Committee on Science and Technology, was returned. But Ken Hechler (D-W.Va.), who chaired a subcommittee on fossil fuels R&D, narrowly failed in a long-shot to retain his House seat. After losing a primary election for the Governorship of West Virginia, he ran a write-in campaign in his old district against the Republican and official Democratic candidates. Other major changes in the House Science and Technology occurred through the retirement of ranking Republican Charles Mosher (R-Ohio), and the fact that Rep. James Symington (D-Mo.) relinquished his House seat to run unsuccessfully for the Senate.

OSTP Sets up Shop

After being temporarily housed at the National Science Foundation, the Office of Science and Technology Policy has moved into permanent quarters. Director H. Guyford Stever is located in the Executive Office Building; the staff, numbering seven professionals, is around the corner in the Executive Office Building Annex. The mailing address is Office of Science and Technology Policy, Executive Office of the President, Washington, DC 20500.

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more clearly. In response to a question from William Fowler, president of the American Physical Society, Carter said that since the LMFBR "will not be economically feasible until the price of uranium increases several times over" and "since England, France and the USSR have design experience with the LMFBR, and because of the mounting cost in environmental problems, our excessive emphasis on this project should be severely reduced and converted into a long-term, possibly multinational, effort."

The matter is ripe for decision because construction of a large demonstration LMFBR is about to begin in Tennessee, and critics have warned that once the project gets under way it will be difficult to stop. Ford's statement, it should be noted, specifically announced that he would continue to support the LMFBR program.

If Carter abandons plans for reprocessing and scales down the LMFBR program his actions would represent major defeats for the nuclear industry, but they would also represent a convincing demonstration of his commitment to reduce US dependence on nuclear technology.

NSF Board Opens Meetings

The National Science Board (NSB) plans to hold its first open meeting, November 18 and 19, in keeping with the requirements of the Government in the Sunshine Act, though the act itself does not become formally effective until March 1977. On the agenda is a discussion of NSF's much-criticized science education program and a review of the Foundation's science information activities. Agenda and details are available from Vernice Anderson, Executive Secretary, NSB National Science Foundation, Washington DC 20550.

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Environmentalists Challenge DNA Guidelines

Two environmentalist organizations have now stepped firmly into the dispute over the risks and benefits associated with recombinant DNA experiments by sending a formal petition to the Secretary of Health, Education and Welfare (HEW), requesting public hearings and the development of new government regulations to control all recombinant DNA experiments in the United States.

In the meantime, the organizations have requested that voluntary guidelines developed by the National Institutes of Health (SGR Vol. VI, No. 12) should be extended to cover research supported by other agencies and by private industry.

The petitions, filed on November 11 by lawyers for the Environmental Defense Fund and the Natural Resources Defense Council, are the first legal moves by environmental groups in the dispute. A letter of endorsement from Robert L. Sinsheimer, chairman of the Biology Department at Caltech, was submitted along with the petitions. Sinsheimer has long been a prominent critic of the NIH guidelines.

The petition states that the NIH guidelines were "the product of the deliberations of scientists who are now conducting recombinant DNA research," and claims that "little discussion was devoted to whether or not these experiments ought to be performed *at all*, even though the question was raised both by concerned laymen and by prominent scientists." It also argues that there is no mechanism to ensure that the guidelines are being obeyed, and that the guidelines are not binding on private industry or government agencies other than NIH — complaints which have also been raised by the New York State

Attorney General's office (SGR Vol. VI, No. 18).

HEW is expected to turn the petition down, however. HEW lawyers have determined that the Department lacks legal authority to enforce regulations in private industry, and even in other agencies. But an inter-agency task force, headed by NIH Director Donald Fredrickson, has recently been established to discuss ways to extend the NIH guidelines to cover all recombinant DNA research in the United States. The task force held its first meeting last week, and it is expected to come up with some recommendations by the end of the year.

NY Academy Charts Activist Role

Sidney Borowitz, Chancellor of New York University, has been appointed full-time director of the New York Academy of Sciences with a mandate, according to the Academy President Philip Siekevitz, to "carry forward a new thrust in the involvement of scientists with major public policy issues."

The appointment is one of several steps taken by Siekevitz, a professor of biochemistry at Rockefeller University, to turn the Academy into a more activist institution. He has also appointed a new editor, Robert Ubell, for the Academy's magazine, *The Sciences*, which is being revamped to provide a forum for discussion of science policy issues. The Academy also sponsors a number of scientific conferences each year, a growing proportion of which is now devoted to matters concerned with science and public policy.

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